

Mulch: Your Tree's Best Friend



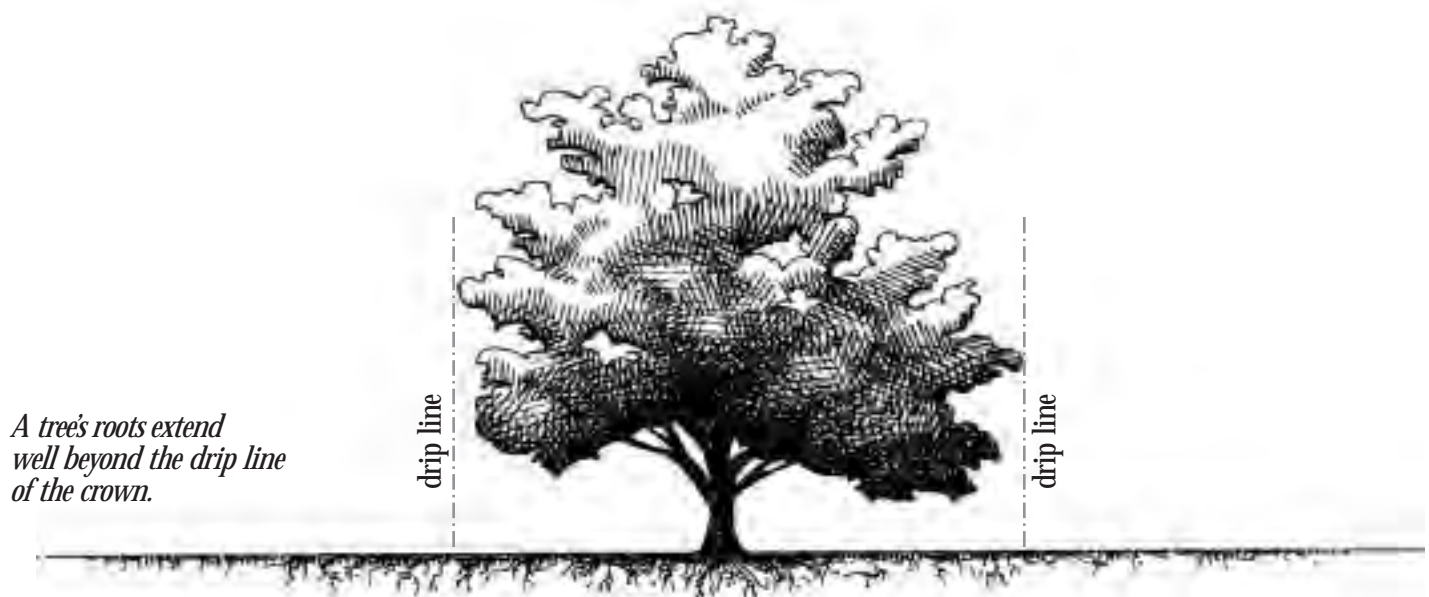
Mulch is any material placed on the soil to conserve moisture and improve growing conditions. Common mulches include wood chips, bark, pine needles and compost. Mulching is one of the most valuable things a homeowner can do for a tree's health. Mulch covering all or a part of a tree's root zone can reduce soil moisture loss, control weed and grass competition, protect the trunk from lawnmowers and improve soil structure. Mulch also gives landscapes a well-groomed appearance. However, if mulch is applied too deep or the wrong material is used, it can actually harm trees and other plants.

Benefits of Mulching

- Helps maintain soil moisture; evaporation and the need for watering is reduced
- Protects the trunk and surface roots from mowers and string trimmers
- Helps control weeds and grass
- Insulates the soil surface, keeping it warmer in winter and cooler in summer
- Improves soil structure, aeration and drainage
- Increased soil fertility as organic matter decomposes
- Easier lawn maintenance
- Well-cared-for appearance

Types of Mulch

- Organic mulches include wood chips, pine needles, shredded bark, nut shells, compost mixes and leaves. Organic mulches decompose at different rates depending on the material and must periodically be replenished.
- Inorganic mulches include decorative stone, lava rock, pulverized tires and geotextile fabrics. Inorganic mulches are useful in xeriscaping and for soil protection in high traffic areas but are not recommended for mulching around trees. Heat reflected from inorganic mulches may be high enough to kill thin-barked trees.



A tree's roots extend well beyond the drip line of the crown.

Proper Mulching

- Check soil drainage in the area to be mulched. Determine if there are trees or plants that may be affected by the type of mulch. Most organic mulches work well in most landscape situations. Some plants may benefit from mulches such as pine needles or bark that acidify the soil.
- Apply a 2- to 4-inch layer of mulch over well-drained soils. Use a thinner layer on poorly-drained soils. The wider the mulch ring, the greater the benefit. Mulch out to the tree's drip line if possible.
- Do not pile mulch against the tree trunk. Pull mulch back several inches from the trunk so the base of the trunk and root crown are exposed. The mulch ring should resemble a "doughnut," not a "volcano."
- If mulch is already present, check the depth. Do not add more if a sufficient layer is already in place. Rake old mulch to break up matted layers and improve its appearance.
- Composted wood chips make good mulch, especially when it contains a mixture of leaves, bark and wood. Fresh wood chips may be used around established trees and shrubs. Avoid using uncomposted wood chips that have piled without exposure to oxygen. Sawdust and straw are not recommended.
- Organic mulches are preferred to inorganic materials. Organic mulches should be well-aerated and composted. Avoid sour-smelling mulch.



A properly mulched tree will have a 2- to 4-inch layer of mulch in a doughnut-shaped ring. The ring should extend out to the tree's drip line if possible.

If a Little is Good, Then . . .

Over-mulching your tree or piling mulch against the trunk can:

- Promote excessive soil moisture and root rots
- Cause inner bark tissue to die
- Lead to insect and disease problems
- Create habitat for rodents that chew the bark and girdle the stem
- Lead to anaerobic conditions that produce alcohols and organic acids toxic to young plants
- Cause imbalances in soil pH
- Become a matted barrier that prevents the penetration of water and air



A mulch "volcano" sets the stage for insect and disease problems, root rot and excessive soil moisture.



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